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Cai et al.

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(54) **PROSTHETIC HEART VALVE INCLUDING STENT STRUCTURE AND TISSUE LEAFLETS, AND RELATED METHODS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(58) **Field of Classification Search**

CPC A61F 2220/0016; A61F 2220/0075; A61F 2/2418; A61F 2230/0054

See application file for complete search history.

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(57) **ABSTRACT**

A method of making a prosthetic heart valve may include providing an annular stent having a plurality of annularly spaced commissure portions having tips, covering each of the tips with a first fabric cover, covering the first fabric covers and the remainder of the stent with a second fabric cover, covering the second fabric cover with a first tissue membrane, and covering the outside of the first tissue membrane with a second tissue membrane, the second tissue membrane forming leaflet portions that extend inwardly between the commissure portions.

17 Claims, 8 Drawing Sheets

